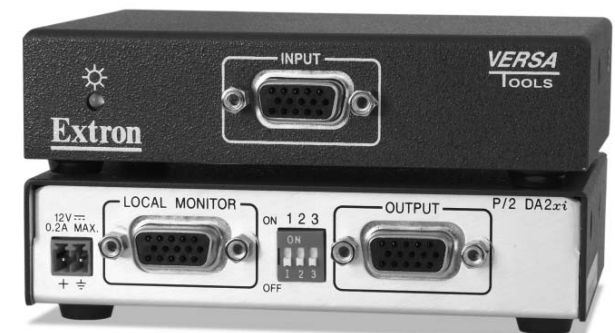


User's Manual



P/2 DA2xi Distribution Amplifier

68-1239-01 **Rev. A**
07 06

Precautions

Safety Instructions • English



This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.



This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

Caution

Read Instructions • Read and understand all safety and operating instructions before using the equipment.

Retain Instructions • The safety instructions should be kept for future reference.

Follow Warnings • Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Consignes de Sécurité • Français



Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).



Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

Attention

Lire les instructions • Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.

Conservier les instructions • Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.

Respecter les avertissements • Observer tous les avertissements et consignes marqués sur le matériel ou présentés dans la documentation utilisateur.

Eviter les pièces de fixation • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

Sicherheitsanleitungen • Deutsch



Dieses Symbol soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.



Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

Achtung

Lesen der Anleitungen • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits- und Bedienungsanleitungen genau durchlesen und verstehen.

Aufbewahren der Anleitungen • Die Hinweise zur elektrischen Sicherheit des Produktes sollten Sie aufbewahren, damit Sie im Bedarfsfall darauf zurückgreifen können.

Befolgen der Warnhinweise • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.

Keine Zusatzgeräte • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

Instrucciones de seguridad • Español



Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.



Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

Precaucion

Leer las instrucciones • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.

Conservar las instrucciones • Conservar las instrucciones de seguridad para futura consulta.

Obedecer las advertencias • Todas las advertencias e instrucciones marcadas en el equipo o en la documentación del usuario, deben ser obedecidas.

Evitar el uso de accesorios • No usar herramientas o accesorios que no sean específicamente recomendados por el fabricante, ya que podrían implicar riesgos.

Warning

Power sources • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

Power disconnection • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

Power cord protection • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

Servicing • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

Slots and openings • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

Lithium battery • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Avertissement

Alimentations • Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité : n'essayez pas de la contourner ni de la désactiver.

Déconnexion de l'alimentation • Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.

Protection du cordon d'alimentation • Acheminer les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas éraillés ou pincés par des objets.

Réparation-maintenance • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à ces opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et autres dangers.

Fentes et orifices • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.

Lithium Batterie • Il a danger d'explosion s'il y a un remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Vorsicht

Stromquellen • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Kontakt ist für einen Erdschluß, und stellt eine Sicherheitsfunktion dar. Diese sollte nicht umgangen oder außer Betrieb gesetzt werden.

Stromunterbrechung • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabel aus der Rückseite des Gerätes, aus der externen Stromversorgung (falls dies möglich ist) oder aus der Wandsteckdose ziehen.

Schutz des Netzkabels • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegen gestellt werden können.

Wartung • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Die internen Komponenten des Gerätes sind wartungsfrei. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst öffnen, da beim Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags und/oder anderer Gefahren bestehen.

Schlitz und Öffnungen • Wenn das Gerät Schlitz oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.

Lithium-Batterie • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie verbrauchte Batterien nur durch den gleichen oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgen Sie verbrauchte Batterien bitte gemäß den Herstelleranweisungen.

Advertencia

Alimentación eléctrica • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearla ni eliminarla.

Desconexión de alimentación eléctrica • Para desconectar con seguridad la acometida de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.

Protección del cable de alimentación • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.

Reparaciones/mantenimiento • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario debe acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.

Ranuras y aberturas • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalentamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.

Batería de litio • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

FCC Class A Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

Extron's Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:
Extron Electronics
1001 East Ball Road
Anaheim, CA 92805, USA

Europe, Africa, and the Middle East:
Extron Electronics, Europe
Beeldschermweg 6C
3821 AH Amersfoort
The Netherlands

Asia:
Extron Electronics, Asia
135 Joo Seng Road, #04-01
PM Industrial Bldg.
Singapore 368363

Japan:
Extron Electronics, Japan
Kyodo Building
16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions or non-Extron authorized modification to the product.

If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), 65.6383.4400 (Asia), or 81.3.3511.7655 (Japan) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

安全须知 • 中文



这个符号提示用户该设备用户手册中有重要的操作和维护说明。



这个符号警告用户该设备机壳内有露的危险电压，有触电危险。

注意

- 阅读说明书** • 用户使用该设备前必须阅读并理解所有安全和使用说明。
- 保存说明书** • 用户应保存安全说明书以备将来使用。
- 遵守警告** • 用户应遵守产品和用户指南上的所有安全和操作说明。
- 避免追加** • 不要使用该产品厂商没有推荐的工具或追加设备，以避免危险。

警告

- 电源** • 该设备只能使用产品上标明的电源。设备必须使用有地线的供电系统供电。第三条线（地线）是安全设施，不能不用或跳过。
- 拔掉电源** • 为安全地从设备拔掉电源，请拔掉所有设备后或桌面电源的电源线，或任何接到市电系统的电源线。
- 电源线保护** • 妥善布线，避免被踩踏，或重物挤压。
- 维护** • 所有维修必须由认证的维修人员进行。设备内部没有用户可以更换的零件。为避免出现触电危险不要自己试图打开设备盖子维修该设备。
- 通风孔** • 有些设备机壳上有通风槽或孔，它们是用来防止机内敏感元件过热。不要用任何东西挡住通风孔。
- 锂电池** • 不正确的更换电池会有爆炸的危险。必须使用与厂家推荐的相同或相近型号的电池。按照生产厂的建议处理废弃电池。

Description

The P/2 DA2xi is a high performance one input, two output distribution amplifier that accepts video input from a VGA-QXGA compatible PC and distributes that signal to separately buffered outputs. The output can be extended with Extron MHR cables up to 250' in length (XGA resolution signal).

The P/2 DA2xi routes all video ID bits to its local monitor output to allow for automatic resolution selection by DDC1 and DDC2 (plug and play cards and projector).

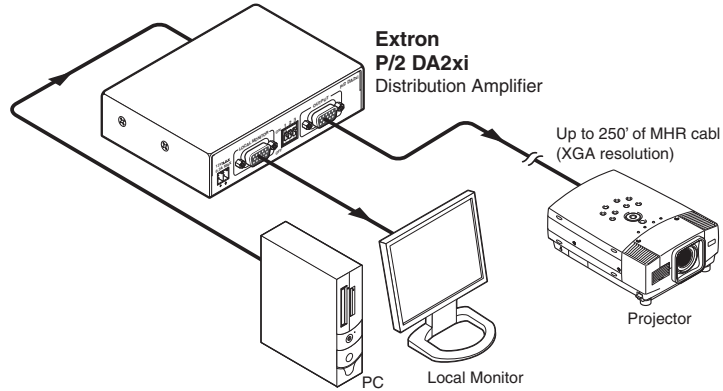
Features

- **Power LED** — useful in system troubleshooting
- **Impedance DIP switches** — for solving laptop compatibility problems and reflection problems due to long cable runs
- **Bandwidth** — 300 MHz (-3 dB) RGB video bandwidth maintains signal integrity
- **ID bits pass-through** — routes ID bits to the local monitor output to allow automatic scan rate selection by DDC

Mounting the P/2 DA2xi

CAUTION Installation and service must be performed by authorized personnel only.

The 1" high, quarter rack width P/2 DA2xi can be placed on a tabletop, mounted on a rack shelf, mounted under a desk or tabletop, or mounted on a projector bracket.



Tabletop placement

Attach the four included rubber feet to the bottom of the distribution amplifier and place it in any convenient location.

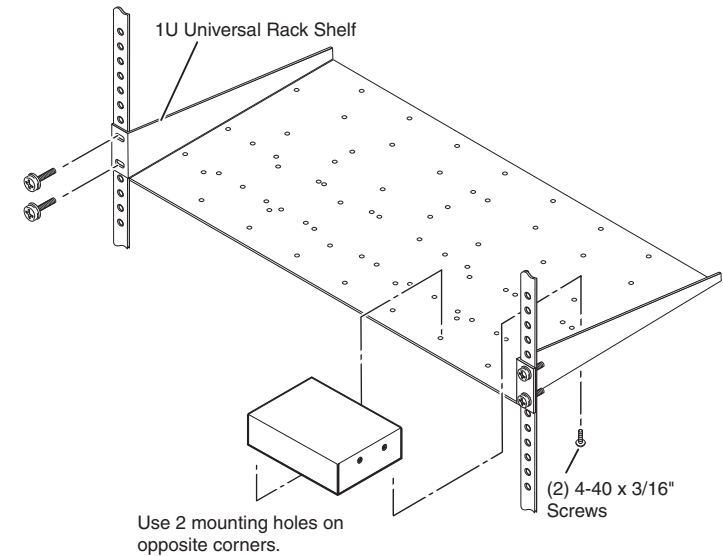
Optional mounting

The P2 DA2xi can be mounted using the following mounting kits:

- RSF 123 VersaTools® rack shelf kit (part #60-190-20)
- RSB 123 VersaTools rack shelf (part #60-604-20)
- RSU 126 6" deep universal rack shelf kit (part #60-190-10)
- RSB 126 6" deep basic rack shelf (part #60-604-10)
- RSU 129 1U universal rack shelf kit (part #60-190-01)
- RSB 129 1U basic rack shelf (part #60-604-01)
- MBU 125 1U under-desk mounting kit (part #70-077-01)
- MBD 129 1U through-desk mounting kit (part #70-077-02)
- VersaTools projector mounting kits (PMK 100, #70-367-01; PMK 250, #70-526-02; PMK 300, #70-374-01; PMK 350, #70-563-02, -03)

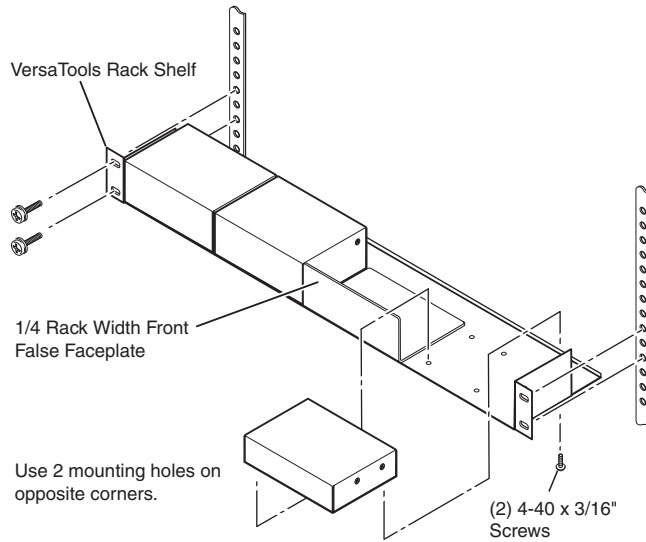
On the non-VersaTools rack shelves, the unit can be mounted in the front or the rear of the rack, as shown in the following illustration.

1. Remove the feet from the bottom of the P/2 DA2xi, if they are installed.
2. Mount the unit using two 4-40 x 3/16" screws in opposite (diagonal) corners to secure the P/2 DA2xi to the shelf.
3. Install false faceplate(s) or other unit(s) to the rack shelf.



Mounting the P/2 DA2xi on a standard rack shelf

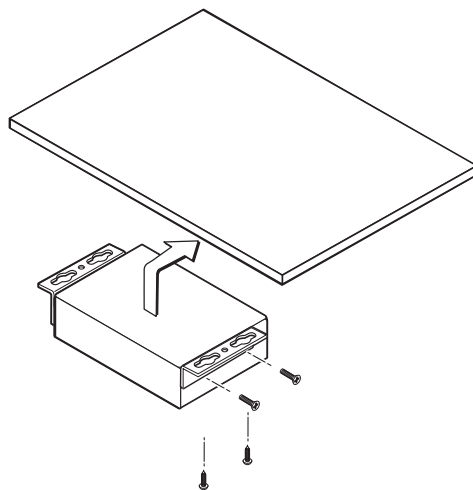
The P/2 DA2xi can also be mounted on a VersaTools rack shelf, as shown in the following illustration.



Mounting the P/2 DA2xi on a VersaTools rack shelf

Under-furniture mounting

The P/2 DA2xi can be mounted under a table or other horizontal surface using an optional Extron MBU 125 under-desk mounting kit (part #70-077-01). Mount the unit under a desk or table, as follows:

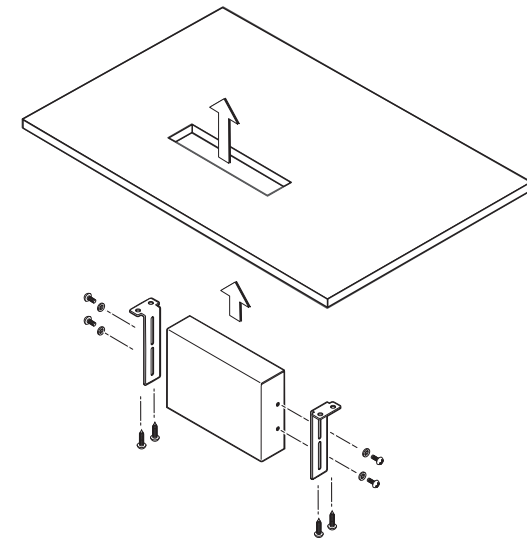


Under-desk mounting

1. Secure the under-desk mounting brackets to the distribution amplifier with the four machine screws provided in the mounting kit.
2. Hold the unit with attached brackets against the underside of the desk or other furniture. Mark the location of holes for screws on the desk.
3. Drill 1/4" (6.4 mm) deep, 3/32" (2 mm) diameter pilot holes in the table or desk at the marked screw locations from the underside or inside (the concealed side) of the furniture, where the distribution amplifier will be located.
4. Insert the four wood screws into the pilot holes. Fasten each screw into the installation surface until just less than 1/4" of the screw head protrudes.
5. Align the installed screws with the slots in the mounting brackets, and place the unit against the surface, with the screws through the bracket slots.
6. Slide the unit slightly forward or back, then tighten all four screws to fasten it in place.

Through-furniture mounting

The distribution amplifier can be mounted through a desk or other furniture using an optional Extron MBD 129 through-desk mounting kit, part #70-077-02. Mount the P/2 DA2xi through a desk or table, as follows:



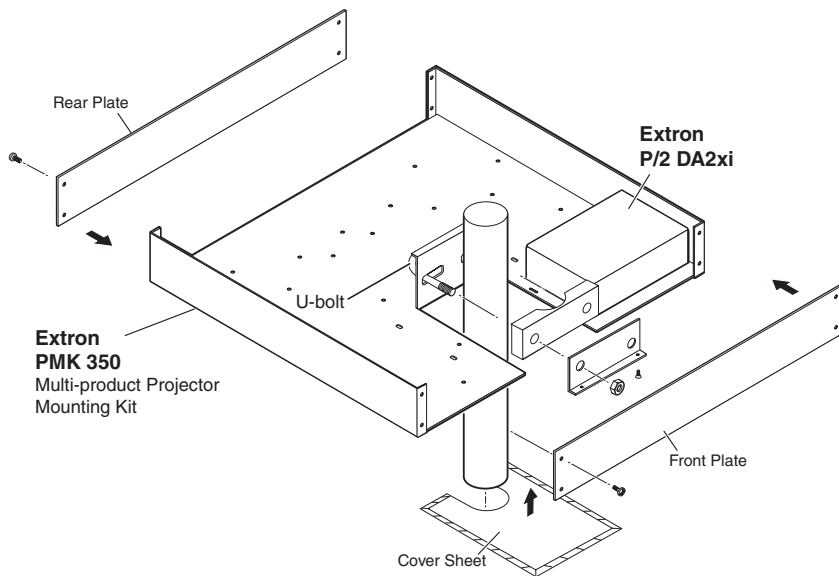
Through-desk mounting

1. Loosely attach the mounting brackets to the unit using the four machine screws and washers supplied with the mounting kit.
2. Hold the distribution amplifier against the inside of the surface through which it will be mounted. Mark the four screw holes on the inside of the surface to which you are mounting the device.
3. Drill four pilot holes, each 3/32" in diameter by 1/4" deep, where you made marks.
4. Using the four wood screws provided, secure the brackets to the mounting surface.
5. Slide the unit up and down in the mounting brackets until the face of the unit is at the desired height. Tighten the screws that secure the bracket in place.

If the screws are inaccessible to a screwdriver:

- a. Mark the location of the brackets relative to the screws.
- b. Remove the P/2 DA2xi from inside the furniture.
- c. Tighten the screws.
- d. Replace the unit inside the surface (step 4).

Projector mounting



Projector mounting the P/2 DA2xi using the PMK 350 Projector Mount Kit

The PMK 350 Low Profile Projector Mount Kit is an above-projector mounting kit that attaches to a 1" to 2" diameter projector mounting pole. It can hold more than one device, in a variety of sizes. The PMK 350 is available in black (part #70-563-02) or white (part #70-563-03).

Follow these steps to mount the P/2 DA2xi on the PMK 350 bracket as follows:

1. Remove the front and back panels from the PMK 350, using an Extron Tweeker or other small Philips screwdriver. (Retain the screws to reattach the plates when you are finished.)
2. Remove any rubber feet from the bottom of the P/2 DA2xi.
3. Secure the P/2 DA2xi to one side of the mounting bracket, using two of the supplied 4-40 x 3/16" screws in opposite (diagonal) corners.
4. Using the two included tie wraps, strap the P/2 DA2xi power supply to the PMK 350 bracket.
5. Place the bracket around the projector ceiling mounting pole as shown in the previous illustration.
6. Place the rubberized contoured base against the pole and opposite the back plate. The pole should fit snugly into the depression in the center of the contoured base.
7. Align the two slotted holes in the bottom of the L-shaped bracket with the two slotted holes in the base of the PMK 350, on either side of the opening for the pole. Attach the L-bracket to the base by inserting two provided 6-32 x 5/16" screws through the aligned slots.
8. Insert the two legs of the provided square U-bolt through the following parts in the order they are listed below:
 - a. The slotted holes on the back side of the bracket mount plate
 - b. The round holes in the rubberized contour base
 - c. The round holes in the L-shaped bracket
 - **For a typical (1.5" to 2.0" diameter) pole** — You can use the supplied square U-bolt, which fits a typical ceiling pole.
 - **For a smaller pole** — Locally obtain a square U-bolt that fits your ceiling pole. The slotted holes on the bracket can accommodate a square U-bolt for pole sizes from 1.0" to 2.0" in diameter.
9. Move the PMK 350 up to the desired location on the ceiling pole, as close to the ceiling as desired.

10. Secure the L-shaped bracket to the square U-bolt using the included hex nuts, washers, and lock washers. Tighten the hex nuts securely.

NOTE Be sure to tighten the hex nuts securely enough that the PMK 350 does not slide down the ceiling pole. A socket wrench is recommended to tighten the hex nuts.

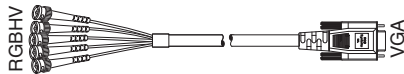
11. Secure the front panel to the mounting tray with four of the included #6 screws.
12. If desired, choose one of the provided four sizes of self-adhesive cover sheets, and apply it to the underside of the mounting tray.

Cabling 15-pin HD Connections

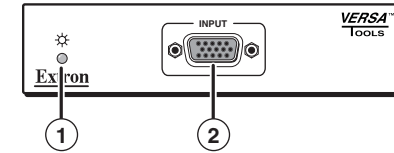
1. Power off the computer and its local monitor.
2. Connect the computer's VGA output to the "Input" of the distribution amplifier. See *Front Panel Features*.
3. Connect the computer's monitor to the "Local Monitor" output and connect the display device to the "Output" of the distribution amplifier. See *Rear Panel Features*. Set the DIP switches for the input and output impedance, and set the gain/peaking DIP switch for the "Output" device.
4. Plug in the distribution amplifier's power supply and power on the local monitor, computer, and display device.

Cabling BNC Connections

Use an Extron SY adapter to connect the P/2 DA2xi's 15 HD VGA output to a display device's 5 BNC connectors.

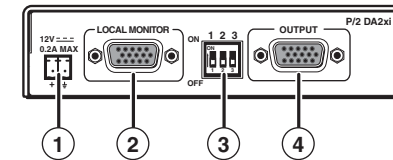


Front Panel Features



- ① **Power LED indicator** —
 - Green LED = power and signal
 - Amber LED = power but no signal
 - Off = no power
- ② **Input connector** — Connect the computer's VGA output to the 15-pin HD female connector.

Rear Panel Features



- ① **Power supply** — Connect the included external 12 VDC , 1 A power supply to the 2-pole 3.5 mm captive screw connector. Be careful to observe the correct polarity. See *Power supply wiring* in the following section for wiring instructions.
- ② **Local Monitor connector** — Connect the computer's monitor to the 15-pin HD connector.
- ③ **DIP Switches** —

Switch 1 (sync input impedance) – Default setting is down (510 ohms). If the image from a laptop computer becomes unstable, slide the switch up (10k ohms).

Switch 2 (sync output impedance) – Default setting is up (50 ohms). If the front LED is green and all the input and output cables are OK, but there is no image at the projector, slide the switch down (75 ohms).

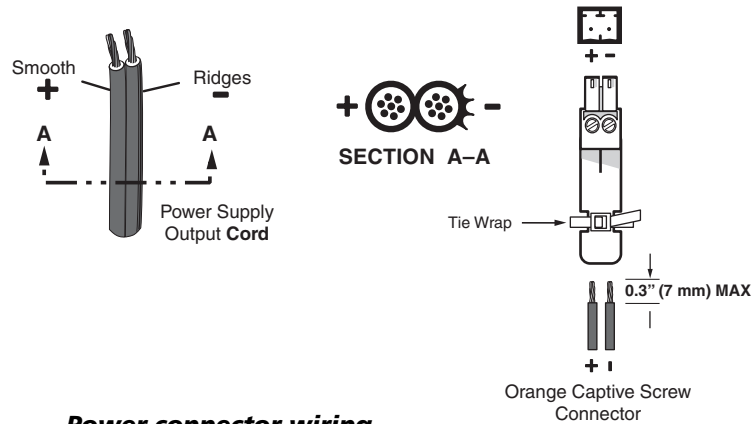
Switch 3 (video gain/peaking) – Slide the switch down (off) if the output cable length is under 100' (30 m). Slide the switch up (on) if the output cable length is over 100' (30 m).

NOTE The gain/peaking switch does not affect the Local Monitor output.

- ④ **Output connector** — Connect the display device to the 15-pin HD connector.

Power supply wiring

Wire the P/2 DA2xi's power connector, as shown below.



Power connector wiring

CAUTION Power supply voltage polarity is critical. Incorrect voltage polarity can damage the power supply and the P/2 DA2xi. Identify the power cord negative lead by the ridges on the side of the cord.

To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.

WARNING The two power cord wires must be kept separate while the power supply is plugged in. Remove power before wiring.

CAUTION The length of the exposed (stripped) copper wires is important. **The ideal length is 0.3" (7 mm).** Longer bare wires can short together. Shorter wires are not as secure in the direct insertion connectors and could be pulled out.

Use the supplied tie-wrap to strap the power cord to the extended tail of the connector.

NOTE Your P/2 DA2xi may have shipped with a blue captive screw connector. This blue connector can be plugged into either a blue or an orange power receptacle.

The ideal length of exposed (stripped) copper wire for the blue connector is 0.2" (5 mm).

The blue connector does not have the extended tail or the included tie-wrap.

NOTE

Do not tin the power supply leads before installing in the direct insertion connector. Tinned wires are not as secure in the connectors and could be pulled out.

Operation

After the distribution amplifier and its connected devices are powered up, the system is fully operational. If any problems are encountered, verify that the cables are routed and connected properly.

Installation and Operation, cont'd

Specifications

Video

Gain	Selectable: 0.7 V (unity), or 0.75 V
Peaking	Selectable: 0 dB or 6 dB @100 MHz
Bandwidth	350 MHz (-3 dB)
Output cable driving distance	
Output.....	Up to 250' (75 m) with Extron MHR cable (XGA resolution)
Local monitor.....	Up to 100' (30 m) with Extron MHR cable (XGA resolution)

Video input

Number/signal type.....	1 VGA-UXGA RGBHV, RGBS, RGsB, RsGsBs input
Connectors	(1) 15-pin HD female
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels.....	Analog, 0.3 V to 1.5 Vp-p with no offset at unity gain
Impedance	75 ohms
Horizontal frequency.....	15 kHz to 135 kHz
Vertical frequency.....	30 Hz to 170 Hz
Return loss	<-38 dB @ 5 MHz
DC offset (max. allowable).....	1.0 V
Input coupling	DC

Video output

Number/signal type.....	1 VGA-UXGA RGBHV, RGBS, RGsB, RsGsBs output; 1 VGA-UXGA RGBHV, RGBS, RGsB, RsGsBs local monitor loop-through (i.d. bits are passed through)
Connectors	(2) 15-pin HD female
Nominal level	0.7 Vp-p for RGB at unity gain
Minimum/maximum levels.....	Analog, 0.3 V to 1.5 Vp-p (follows input)
Impedance	75 ohms
Return loss	<-40 dB @ 5 MHz
DC offset	±5 mV with input at 0 offset

Sync

Input type	RGBHV, RGBS, RGsB, RsGsBs
Output type.....	RGBHV, RGBS, RGsB, RsGsBs
Input level	1.5 V to 5.0 Vp-p

Output level	TTL, 4 V to 5 Vp-p, unterminated
Input impedance	510 ohms
Output impedance	75 ohms or 55 ohms, switchable (output impedance resistors are 50 and 30 ohms)
Max input voltage	5.0 Vp-p
Max. propagation delay	60 ns
Max. rise/fall time	4 ns
Polarity.....	Positive or negative (follows input)

General

Power	Supplied by an external power supply or by pin 9 of the VGA input of a PC that complies with VESA DCC version 3
External power supply	100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A, regulated
Power input requirements	12 VDC
P/2 DA2xi	0.1 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount	Yes, with optional RSU 129 or RSB 129 1U rack shelf, part #60-190-01 or 60-604-01; RSU 126 or RSB 126 6" deep rack shelf, part #60-190-10 or 60-604-10; or the VersaTools® RSF 123 or RSB 123 rack shelf, part #60-190-20 or 60-604-20. Also furniture mountable with optional MBD 129 through-desk mount kit, #70-077-02, or attachable to a projector mount using an optional PMK 250 projector mount kit, #70-526-02.
Enclosure type	Metal
Enclosure dimensions	1.0" H x 4.3" W x 3.0" D (quarter rack wide) 2.5 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight	0.5 lbs (0.3 kg)
Shipping weight	3 lbs (2 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Listings.....	UL, CUL
Compliances.....	CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF.....	30,000 hours

Installation and Operation, cont'd

Warranty 3 years parts and labor

NOTE All nominal levels are at $\pm 10\%$.

NOTE Specifications are subject to change without notice.

Included Parts

Description	Part number
P/2 DA2xi	60-506-03
M6' MHR cable — 6' (1.8 m)	26-238-02
P/2 DA2xi User's manual	
2-pin captive screw mating plug	
12VDC, 1 A external power supply	

Mounting accessories

Description	Part number
RSF 123 VersaTools® rack shelf kit	60-190-20
RSF 123 VersaTools rack shelf	60-604-20
RSU 126 6" deep universal rack shelf kit	60-190-10
RSU 126 6" deep basic rack shelf	60-604-10
RSU 129 1U universal rack shelf kit	60-190-01
RSU 129 1U basic rack shelf	60-604-01
MBU 125 under-desk mount kit	70-077-01
MBU 125 through-desk mount kit	70-077-02
PMK 100 1U mini-projector mount kit	70-217-01
PMK 300 VersaTools multi-product projector mount kit	70-374-01
PMK 350 multi-product projector mount kit (black, white)	70-563-02, -03

Cables

Description	Part number
M6' MHR cable — 6' (1.8 m)	26-238-01
M15' MHR cable — 15' (4.5 m)	26-238-02
M50' MHR cable — 50' (15.2 m)	26-238-18
M75' MHR cable — 75' (22.8 m)	26-238-19
M100' MHR cable — 100' (30.4 m)	26-238-20
SY VGAM-RGBHVM — 6' (1.8 m)	26-533-02
SY VGAM-RGBHVM — 25' (7.6 m)	26-533-04
SY VGAM-RGBHVM — 50' (15.2 m)	26-533-06
SY VGAM-RGBHVM — 100' (30.4 m)	26-533-07

Accessories

Description	Part number
1U VersaTools rack shelf kit	60-190-01
1U VersaTools basic rack shelf kit	60-604-20
1U Universal rack shelf kit	60-190-01
1U Universal basic rack shelf kit	60-604-01
Projector mounting kit	70-077-04